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EXAMINER

PATTERSON, MARC A

ART UNIT

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/520,608
Filing Date: January 03, 2006
Appellant(s): DURRANT ET AL.

Don W. Bulson
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed May 24, 2010 appealing from the Office action mailed June 24, 2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

1 – 34.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN

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REJECTIONS.” New grounds of rejection (if any) are provided under the subheading “NEW GROUNDS OF REJECTION.”

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant’s brief.

(8) Evidence Relied Upon

6,387,461 B1	EBNER et al.	5-2002
2,877,197	FISHER	3-1959

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections – 35 USC § 102(b)

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9- 16, 18-29 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Ebner et al. (U.S. Patent No. 6,387,461 B1).

With regard to Claims 1 - 4, 11, 14 - 15 and 29, Ebner et al disclose a package packaging an item and defining a closed environment in which the item is enclosed (column 3, lines 50 - 52), the packaging including an oxygen - scavenging element which includes titanium oxide (column 4, lines 40 - 60), therefore a photo - activatable semiconductor and polyvinyl chloride

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(column 8, lines 56 - 57), therefore an electron donor that is an organic material; Ebner et al therefore also include a semiconductor that whilst exposed to ultra - bandgap light generates electron - hole pairs, with the electrons acting to reduce oxygen, thereby to scavenge the same from the closed environment, and the holes combining with electrons sacrificed by the electron donor.

With regard to Claims 5 - 6, the organic material comprises EDTA (column 5, line 68).

With regard to Claim 7, the organic material comprises an alcohol (column 8, line 56).

With regard to Claim 9, the organic material comprises an aldehyde (column 10, line 52).

With regard to Claims 10, 12 - 13 and 19, the oxygen scavenging element comprises a suspension containing the semiconductor (column 7, lines 60 - 64), therefore also including a gas and vapor.

With regard to Claims 16 and 18, the semiconductor comprises zinc oxide (column 4, lines 40 - 43).

With regard to Claim 20, the oxygen scavenging element comprises a paste containing the semiconductor (column 11, lines 50 - 51).

With regard to Claims 21 - 22, the oxygen scavenging element comprises a gel containing the semiconductor (dispersion, therefore including a liquid; column 8, line 2).

With regard to Claims 23 - 25, the oxygen scavenging element comprises titanium oxide, as discussed above; the oxygen scavenging element therefore comprises a block, layer or powder containing an activatable semiconductor.

With regard to Claims 26 - 27, the oxygen scavenging element is a packaging element, as stated above, and therefore comprises an encapsulating layer and film encapsulating at least a surface of the item.

With regard to Claim 28, the packaging includes an open - topped container and the oxygen - scavenging element comprises a film which closes the container (pouch; column 3, lines 48 - 50).

With regard to Claim 34, the item comprises a foodstuff (column 7, lines 39 - 40).

Claim Rejections – 35 USC § 103(a)

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17 and 30 - 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ebner et al (U.S. Patent No. 6,387,461 B1).

Ebner et al disclose an oxygen scavenging element for a package, as discussed above. The element comprises transition metal oxide (column 5, lines 47 - 55). With regard to Claim 17, Ebner et al fail to disclose a metal oxide comprising tungsten oxide. However, Ebner et al disclose the use of a transition metal oxide, as discussed above. It therefore would have been obvious for one of ordinary skill in the art, at the time Applicant's invention was made, to have provided for tungsten oxide, as tungsten oxide is a transition metal oxide.

With regard to Claims 30 - 33, Ebner et al fail to disclose a package comprising an item that is an opto - electronic device, molecular device or a polymeric device. However, Ebner et al disclose a package, as discussed above. It therefore would have been obvious for one of ordinary skill in the art, at the time Applicant's invention was made, to have provided for a package comprising any item, including an opto - electronic device, molecular device or a polymeric device.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ebner et al. (U.S. Patent No. 6,387,461 B1) in view of Fisher (U.S. Patent No. 2,877,197).

Ebner et al disclose an oxygen scavenging element for a container comprising a polymer as discussed above. Ebner et al fail to disclose an element comprising a thiol. Fisher teaches a polymer comprising a polythiol for the purpose of obtaining a polymer that is corrosion resistant (column 1, lines 23 - 25). One of ordinary skill in the art would therefore have recognized the advantage of providing for the polythiol of Fisher in Ebner et al, which comprises a polymer, depending on the resistance of the end product. It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a thiol in Ebner et al in order to obtain a polymer that is corrosion resistant as taught by Fisher.

(10) Response to Argument

Appellant argues that titanium dioxide is not disclosed by Ebner et al because only titanium metal and the inorganic metal salts in column 5, line 56 to column 6, line 9 are disclosed by Ebner et al.

However, in addition to the disclosure of titanium metal, at column 4, line 53, Ebner et al disclose the oxides of the metal at column 5, line 52; Ebner et al therefore discloses oxide salt of titanium, and Ebner et al therefore disclose titanium dioxide.

Appellant also argues that Ebner et al disclose a carrier that is polyvinyl chloride but Ebner et al do not disclose that the polyvinyl chloride is an electron donor.

However, because Ebner et al discloses titanium dioxide, as stated above, and polyvinyl chloride as a carrier, as in the claimed invention, Ebner et al disclose polyvinyl chloride that functions as an electron donor, as in the claimed invention.

Appellant also argues that zinc and tungsten are not disclosed by Ebner et al because although transition metals are disclosed by Ebner et al, Ebner et al limit the transition metals which are disclosed.

However, although metals are disclosed by Ebner et al as transition elements which are included, the transition metals disclosed are not limited by Ebner et al; the transition metal salts disclosed by Ebner et al therefore include zinc and tungsten salts.

Appellant also argues that aside from corrosion resistance, there is no teaching in Ebner et al or Fisher, that the use of thiol would maintain the functionality of Ebner et al, of permitting the ingress of oxygen into the carrier thereby permitting oxygen scavenging to occur.

However, the inhibition of oxygen scavenging by thiol is not disclosed by Ebner et al; furthermore as stated in the previous Action, it would have been obvious for one of ordinary skill in the art to provide for thiol in Ebner et al to provide corrosion resistance as taught by Fisher et al.

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Appellant also argues that it would not have been obvious for one of ordinary skill in the art to provide for containment of an electronic device in Ebner et al because Ebner et al is disclosed in the context of foodstuffs and is the oxygen scavenging is moisture – activated, and the presence of moisture would be detrimental to an electronic device.

However, Ebner et al is not limited to foodstuffs; furthermore, Appellant does not state why the presence of moisture would necessarily be detrimental to, or inhibit the function of, an electronic device.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Marc A Patterson/

Primary Examiner, Art Unit 1782

Conferees:

/Christopher A. Fiorilla/
Chris Fiorilla
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